

Module 4

Impact on Health Care

In this module, we will discuss:

- Health care resources
- Government emergency health powers
- Ethical issues of a flu pandemic
- Flu care at home

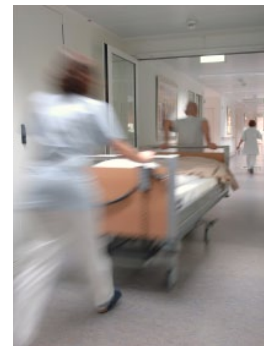
A flu pandemic will affect millions of people across the globe, but you and your loved ones should expect to feel its impact at the local level. A severe pandemic is expected to result in shortages of health care services and medical supplies, government-imposed restrictions on public gatherings, and many complex ethical decisions. Individuals who plan now to be able to care for themselves later will be more informed, have more resources at hand, and even increase their chance of survival.



Health Care Resources

In a severe pandemic, the death toll could be very high. In addition, health planners predict that flu sufferers could overwhelm our health care system. Imagine a hospital emergency room swamped by hundreds of sick patients – all demanding medical attention. To meet that overwhelming demand, hospitals have developed “surge capacity” plans to help them handle as many patients as possible. Surge capacity is the ability to quickly expand medical services in response to demand. In the case of a flu pandemic, that increased demand would be for a long period of time, probably months. Hospital rooms may have to hold double or triple the usual number of patients. Surgeries that are not critical may be canceled so medical staff can tend to flu patients. Patients may need life support, such as ventilators to help them breathe, but some of this medical equipment may be in short supply.

During a flu pandemic, there will be fewer medical professionals able to care for the growing number of flu patients. Remember that the flu does not just affect “the public” – it also affects the doctors, nurses, aides and support staff who care for the sick. At the very time the nation’s medical care needs are most urgent, many of these workers may be too sick to help or may want to stay home to care for their own families, who will be affected by the flu like everyone else. The shortage of health care workers during a flu pandemic means that those medical professionals who do come to work will have to work in various roles and for longer hours.



Pandemic Influenza Awareness Program

This program is made possible by the New Jersey Office of Homeland Security and Preparedness and the New Jersey Department of Health and Senior Services.





In the event of a severe flu pandemic, the triage process will help medical professionals identify patients who are most in need of care and most likely to benefit from immediate medical treatment.

By providing care at home and using community health centers during a pandemic, we can reduce the demand on our hospitals' limited resources.



TRIAGE

Triage (pronounced “tree-ahzh”) systems, often used in hospital emergency rooms, will be needed during a flu pandemic. Triage is the practice of ranking patient care based on which patients need medical care most urgently. In the event of a severe flu pandemic, the triage process will help medical professionals identify patients who are most in need of care and most likely to benefit from immediate medical treatment. Triage is also used when there are more patients than there are medical resources. These scarce resources may be medications, other medical supplies and equipment, or health care staff.

COMMUNITY HEALTH CENTERS

Flu sufferers who do not need to be hospitalized may be sent to local Federally Qualified Health Centers (FQHCs) or other community health centers to get the medical care they need. However, resources will be scarce everywhere and it's likely that most sick people will have to be cared for at home by family members. Later in this module, we'll be talking about how to care for yourself and your loved ones during a flu pandemic. By providing care at home and using community health centers during a pandemic, we can reduce the demand on our hospitals' limited resources.



QUIZ 1

During an emergency situation, individuals seeking care may be triaged based upon

- ☐ A: Who will benefit most from immediate medical care
- ☐ B: Who has health insurance
- ☐ C: Who got here first
- ☐ D: Who has been a patient here before

Answers are at the end of this module.

Government Emergency Health Powers

During a flu pandemic, local, state and federal government authorities may have to take special actions to reduce the spread of disease and control the distribution of limited services and supplies. In a severe pandemic, the government's legal authority to control disease will be expanded through the use of emergency health powers.

SOCIAL DISTANCING

In Module 3, we discussed the term “social distancing.” To control the spread of pandemic flu, public health officials may require social distancing. For example, during the 1918 flu pandemic, the city of St. Louis immediately banned all public gatherings, an action that helped save thousands of lives. In contrast, Philadelphia waited more than two weeks to implement social distancing measures, and suffered one of the highest pandemic flu death rates in the country.



When the time comes, cooperate with the instructions of local, state and federal officials to help contain the spread of disease. Sometimes these instructions may be inconvenient for you or cause financial hardship, but they are essential to containing the spread of a pandemic.



PHOTO COURTESY NAVAL HISTORICAL CENTER

ISOLATION AND QUARANTINE

In a pandemic, isolation and quarantine are both tools that may be used to help reduce the spread of flu.

Isolation restricts the movement of people who are already sick with an infectious disease so they can't spread the disease to healthy people. People who are “isolated” are kept away from people who are healthy until they are no longer contagious. It is commonly practiced in hospitals and health care facilities, but is otherwise usually voluntary rather than mandatory.



Quarantine restricts the movement of people who are not yet sick, but have been exposed to the flu and may become contagious without knowing it. Remember: People can be infectious for up to 24 hours before they start to show symptoms of the flu. People who are quarantined are kept away from people who are healthy. The length of quarantine depends on the incubation period – the number of days it would take that person to get sick if they were infected. If they become sick, they are then isolated. If they don't get sick, they are released from quarantine. However, they could be re-quarantined if they are exposed again to someone with the flu.

Read the *Isolation and Quarantine Fact Sheet* at the end of this module for more information.

PANDEMIC FLU VACCINE

Since flu pandemics are caused by a new type of flu virus, there will be no effective flu vaccine available at the beginning of a pandemic. Researchers will have to quickly create and mass produce a new flu vaccine. That process could take many months. When a vaccine finally starts to become available, demand for it will likely be greater than the supply because everyone will want to protect themselves and their loved ones at once. Production and distribution can't move that fast. This is where the government steps in to control the distribution of a limited supply. But this also raises, perhaps, some of the toughest questions for planners – and for society. While the goal is to vaccinate everyone who wants to be vaccinated, who gets the vaccine first? And who gets it next?

In a severe pandemic, it is important to quickly vaccinate those responsible for controlling the flu pandemic and maintaining society. It's also important to vaccinate individuals who are most at risk. Therefore, our federal government's 2008 plan identifies these major categories for early vaccination: public health and medical professionals, emergency services personnel (emergency medical services, police, fire), manufacturers of vaccine, people responsible for homeland security, and pregnant women, infants and toddlers.

However, the plan is flexible and may change in response to who is most affected by the specific flu virus. For example, if young adults are more likely to get very sick or die, they may become one of the major categories for vaccination.



In a severe pandemic, it is important to quickly vaccinate those responsible for controlling the flu pandemic and maintaining society.



QUIZ 2

Let's pretend there were some cases of pandemic flu overseas and it hadn't reached the U.S. yet. An American tourist named Jane returns from a trip overseas and says she was exposed to someone who had the disease. Jane has no signs or symptoms of the disease. Which type of restriction, if any, would be appropriate for her?

- ☐ A: Isolation
- ☐ B: Quarantine
- ☐ C: None of the above

Answers are at the end of this module.

Ethical Issues of a Flu Pandemic

Ethics – the system of principles we use to evaluate whether an action is right or wrong – may become an issue during a flu pandemic. If we judge an action to be fair, acceptable or necessary, we say the action is ethical. During a flu pandemic, our two goals are to reduce the number of flu-related deaths and hospitalizations and to ensure the functioning of society. There are many ethical dilemmas related to a flu pandemic, such as:

- During shortages of medical staff and services, is there a minimum level of care all patients should receive?
- Who gets the earliest access to limited health care services and resources, including flu vaccine and non-flu related medications?
- What types of public places have to be closed to promote social distancing?
- Who is responsible for providing food, water and medical supplies to individuals who are isolated or quarantined?

These are just a few of the challenging questions that government and flu pandemic planners are trying to deal with. We may not have all the answers until the actual event occurs. These ethical decisions will be made by considering the best science and medical practices, and with respect and consideration for both individuals and communities.

In doing so, people cannot be discriminated against based on race, social status, religion or other grouping. Restrictions on personal freedom should not be adopted unless there is reasonable evidence that restrictions are necessary to help control the spread of the flu. The government is also responsible for protecting groups who have additional risk factors, such as people who have trouble receiving or following health instructions, or who need assistance to meet basic needs. In the end, these practices will work best if the decision-making process involves the public and everyone understands and supports the decisions.



Ethical decisions will be made by considering the best science and medical practices, with respect and consideration for both individuals and communities. In doing so, people cannot be discriminated against based on race, social status, religion or other grouping.



QUIZ 3

People who provide medical care may be among the first recipients of pandemic flu vaccine?

☐ True ☐ False

Answers are at the end of this module.

Flu Care at Home

Now that we've explained how a flu pandemic can affect different aspects of health care and everyday life, it should be clear that you may need to provide your own care for flu at home.

Read the *Caring for the Flu at Home: A Self-Help Guide* at the end of this module. Put these pages in your Pan Flu Resources folder, together with the *Pan Flu Personal Emergency Plan* you created in Module 2.

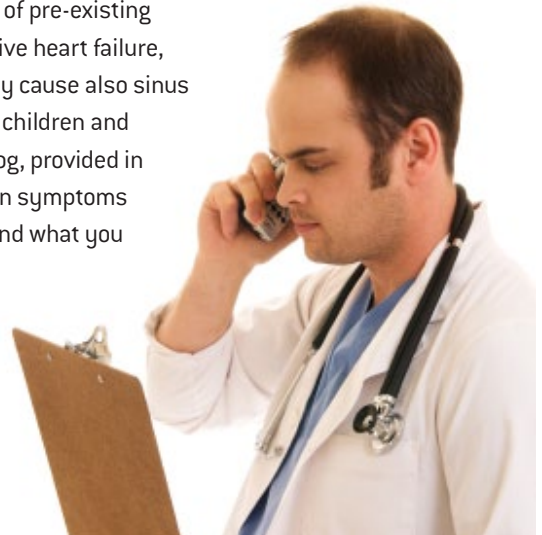
This guide is intended to help you recognize the symptoms of influenza and care for sick people at home, both during a typical flu season and during a flu pandemic. While you may not need this information immediately, it's a good idea to get familiar with it in advance so if you have any questions, they can be answered before an emergency occurs. Here are some of the critical aspects of home care. They are covered in detail in the guide.



A flu pandemic could strain the medical resources we often take for granted. If a pandemic does cause shortages, we all have a responsibility to avoid burdening the system for cases that do not require medical care.

Critical Aspects of Home Care

- **DIAGNOSIS** – The flu is more than just a bad cold. The symptoms listed in this section will help you understand the differences between the two.
- **CARE** – Since most adults and children sick with pandemic flu will be cared for by another person in their household, it will be important for the caregiver to know how to do certain things. This section gives information on how to treat fever, body aches and headache, cough and other symptoms that may occur with the flu, such as vomiting and diarrhea, abnormal breathing and dehydration.
- **WHEN TO SEEK MEDICAL ATTENTION** – Know when it's appropriate to get help and when it's not. A flu pandemic could strain the medical resources we often take for granted. If a pandemic does cause shortages, we all have a responsibility to avoid burdening the system for cases that do not require medical care. This section provides guidance on when to seek treatment.
- **PERSONAL CARE LOG** – The flu and its complications can cause death. Some of these complications include fluid loss, pneumonia and the worsening of pre-existing medical problems like congestive heart failure, asthma or diabetes. The flu may cause also sinus problems and ear infections in children and adults. Use the personal care log, provided in the guide, to keep track of when symptoms appear, how severe they are, and what you did to treat them. It also will be a good record for your health care provider if you need medical care.





In Module 5, you'll learn how employers and employees can join the effort to prepare.

MODULE 4 ANSWERS

QUIZ 1: A – WHO WILL BENEFIT MOST

Individuals seeking care may be triaged to determine who will benefit most from immediate medical care.

QUIZ 2: B – QUARANTINE

Jane has been exposed to pandemic flu and we don't know if she is infected with the virus. Since she may become contagious, she will be quarantined until the incubation period is over. Remember, you can spread the flu for up to 24 hours before you feel sick.

QUIZ 3: TRUE

Since health care workers provide care for persons who are ill and are at greater risk of infection because of their jobs, they are likely to be among the first recipients of pandemic flu vaccine.



Personal Responsibility

Until this point, we have focused on the tough situations that will face health care providers and government officials. We've also discussed our individual responsibilities to reduce the spread of disease and lessen the impact on society. In Module 5, you'll learn how employers and employees can join the effort to prepare.

Let's Review!

- Health care resources may be limited during a flu pandemic.
- Government health officials may recommend or require certain actions.
 - Social distancing
 - Isolation
 - Quarantine
- The federal government identifies certain major categories for early vaccination.
- There are many ethical decisions to be made related to a flu pandemic.
- Four critical aspects of home care:
 - Diagnosis
 - Care
 - When to seek medical attention
 - Personal care log

RESOURCES FOR MODULE 4

- *Isolation and Quarantine Fact Sheet* (shown at the end of this module), from the New Jersey Department of Health and Senior Services
www.nj.gov/health/flu/documents/isolation_and_quarantine.pdf
- *Caring for the Flu at Home: A Self-Help Guide* (shown at the end of this module), from the New Jersey Department of Health and Senior Services
www.nj.gov/health/flu/documents/flu_guide.pdf
- www.pandemicflu.gov
- www.njflupandemic.gov

Be sure to check these websites for updated information.

See you in Module 5!

Public health officials use many methods to control the spread of infectious disease. Two of these methods are isolation and quarantine. Both methods aim to control exposure to infectious disease.

Isolation is for people who are sick with an infectious disease.

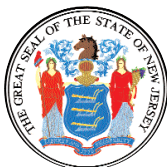
- Isolation separates and restricts the movement of sick people so they can't spread disease to healthy people.
- Isolation is a routine procedure in hospitals and healthcare facilities.
- Isolation is voluntary, but in a public health emergency, officials have the authority to isolate people who are sick.

Quarantine is for people who have been exposed to an infectious disease, but are not sick.

- Quarantine separates and restricts the movement of people who have been exposed to an infectious disease and may become contagious.
- Quarantined people may or may not become sick.
- Quarantined people may stay at home so they don't spread disease to healthy people.
- If you are quarantined and you become ill, you can seek medical treatment from a healthcare provider.
- Quarantine is voluntary, but in a public health emergency, officials have the authority to quarantine people who have been exposed to an infectious disease.

For More Information

- Talk to your healthcare provider
- Visit the N. J. Department of Health and Senior Services website at www.nj.gov/health
- Call the N.J. Department of Health and Senior Services, Communicable Disease Service at (609) 588-7500.
- Call your local department of health. The number can be found in your local telephone book or at this webpage: www.nj.gov/health/lh/directory/lhdselectcounty.shtml
- Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/ncidod/sars/isolationquarantine.htm>



Caring for the Flu at Home: A Self-Help Guide



The Home Care Association of New Jersey

The New Jersey Department of Health and Senior Services

Rutgers University, New Jersey Agricultural Experiment Station

Acknowledgements

Sections of this guide were adapted with permissions from:

Maryland Department of Health and Mental Hygiene

Massachusetts Department of Public Health

Montgomery County Department of Health and Human Services

New York State Department of Health

Public Health Seattle & King County

Santa Clara Valley Health and Hospital System

Vancouver Coastal Health



April 2009

Table of Contents

Contents	Page
Purpose	3
Diagnosis	3
Protect Yourself	5
Protect Others	10
Cleaning & Disinfecting	10
Flu Care Instructions	13
Dehydration: Acceptable Liquids	20
If YOU Have the Flu	24
Maintain a Healthy Mind and Body During a Flu Pandemic	25
Personal Care Log	26

Purpose

Most people with the flu will be able to remain at home while they are sick. They can care for themselves or be cared for by others who live in the household. This information is intended to help recognize the symptoms of influenza and care for sick people in the home.



Diagnosis

How do I know if I have influenza?

You may have influenza if you have a sudden onset of respiratory illness with a cough, fever, headache, muscle pain, a runny nose, sore throat, and body aches. Sometimes, but not very often, children with influenza can have nausea, vomiting, or diarrhea. Adults over 65 years of age and children under 5 years of age may not have a fever when sick with influenza. Although colds and other viruses may cause similar symptoms, influenza weakens a person much more. Most healthy people will feel better in about five to seven days but full recovery may take 2-3 weeks. Complications of influenza, such as pneumonia, can be more severe for the elderly, infants, or people with chronic health problems.



Diagnosis

Is it a cold or influenza?

Colds may cause symptoms similar to influenza, but influenza can lead to complications. The following is a chart of the common signs and symptoms of influenza. Unlike a cold, which has symptoms that come on gradually, flu symptoms usually hit a person all at once. Fever and severe body aches are common.

IMPORTANT: A pandemic flu virus may produce symptoms that are different from a seasonal flu strain. For instance, the 1918 pandemic flu strain caused a rapid build-up of fluid in patients' lungs (a condition known as pulmonary edema), along with a severe blood clotting disorder. Thus, pandemic flu symptoms may be different from and more severe than those listed in this chart:

Symptoms	Flu
Fever	Sudden, often high (102° to 104° F) Lasts three days or more
Headache	Sudden and can be severe
Body aches	Usual, often severe
Fatigue and weakness	Yes, sudden and can last 2 to 3 weeks
Cough	Common, can be severe
Sore throat, sneezing and stuffy nose	Sometimes
Diarrhea and vomiting	Common in children

Protect Yourself

If you are caring for someone with the flu, be sure to take care of yourself first. Really! Flu can spread easily from person to person. Anyone who is in a home where someone has the flu can become infected. If you get sick, you won't be able to help others. Previously healthy adults who get the flu are most likely to be infectious to others for the first five days after getting sick. Children and sick people who are immuno-compromised can be infectious for longer periods. If possible, just ONE person should be assigned to provide care to the person who is sick. To further reduce the caregiver's risk of infection:

Limit contact with the person who is ill. It is important to keep the sick person isolated from others in the home. If someone other than the caregiver goes into the sick room, make sure that the person stays about 6 feet away from the sick person. Keep necessary supplies (thermometer, tissues, medicines, drinks, etc.) in the same room as the sick person. This will help prevent the spread of the virus.

Wash your hands often with soap and warm water, scrubbing for 15-20 seconds. This is the most important and easiest thing you can do to protect yourself and others. If soap and water are not available, use an alcohol-based hand sanitizer, containing at least 60% alcohol.

Wash your hands or use hand sanitizer:

- before and after touching a person who is sick
- before and after using the bathroom
- before and after eating
- before touching your eyes, nose, or mouth
- before and after using Personal Protective Equipment (see next page for details)



Personal Protective Equipment (PPE)

In this guide, PPE refers to protective clothing designed to prevent the spread of infection. This includes facemasks, respirators and gloves.

Protect Yourself

PPE for the Sick Person

- **Wear a facemask.**

A facemask is a loose-fitting disposable mask that covers the nose and the mouth. People wear them to help stop their own large droplets from spreading to others. Wearing a facemask may be useful in decreasing the spread of influenza when worn by the person who is ill during close contact (within 6 feet) with anyone. However, ***facemasks are not designed to protect you from breathing in very small particles, like the flu virus.***

Change and throw away facemasks when they become moist.

If the sick person is not wearing a facemask when others are in the room, they should cover their nose and mouth with a tissue when sneezing or coughing. Tissues used by the sick person should be placed in a plastic bag. The bag should be tied or knotted shut and thrown away with regular trash.



PPE for the Caregiver

- **Wear a respirator** during close contact (within 6 feet) with the sick person.

A respirator is designed to protect you from breathing ***in*** very small particles that may contain viruses like pandemic flu. An example of one is the N95 filtering face piece respirator. It is designed to filter out 95% of very small airborne particles. Respirators, such as the N99 and N100, which filter out more than 95% of airborne particles, can also be used. If more than one person in the household has the flu and they are in separate rooms, wear a new respirator when caring for each sick person. If they are sharing a room and the respirator you are wearing has visible mucous from a sick person on it, put on a new respirator before caring for the next person.

- **Wear disposable gloves** when in contact with or cleaning up body fluids or contaminated items such as tissues.

Gloves help protect you from contact with the pandemic flu virus and other infectious diseases. If gloves are used, throw them away after each use.

On the following pages, learn how to properly put on and take off PPE.

Protect Yourself

Facemasks and Respirators

Wearing a facemask or respirator incorrectly or removing or disposing of it improperly can contaminate the wearer's hands or mucous membranes with virus, possibly resulting in exposure of the wearer or others to the virus. The following instructions use the word "mask." The instructions apply to both facemasks and respirators.



- Before putting on a mask, wash hands thoroughly with soap and water. Use an alcohol-based hand sanitizer if soap and water are not available.
- Avoid touching the outside of the mask during and after use to help prevent contamination of hands with infectious material that may have collected there.
- Change and throw away masks when they become moist.
- Once worn, the disposable mask should be removed carefully touching only the elastic bands or ties at the back of the head, then placed in a plastic bag that is tied or knotted shut and thrown away with regular trash.
- If disposable masks are not available and a reusable fabric mask is used, it should be removed in the same way, washed with normal laundry detergent, and tumble-dried in a hot dryer.

It should be noted that no reusable fabric masks have been evaluated by the Food & Drug Administration (FDA) for use in preventing transmission of infectious agents, and none are legally marketed in the United States for use in infection control.

- After the mask has been removed and discarded, wash hands thoroughly with soap and water. Use alcohol-based hand sanitizer if soap and water are not available.

For updated information from the U.S. Centers for Disease Control and Prevention on the use of facemasks and respirators, refer to:

<http://pandemicflu.gov/plan/communitymaskguidancecommunity.html>

Protect Yourself

Gloves

While gloves help protect you, once contaminated, they can become a means for spreading infectious droplets to yourself, others, or environmental surfaces. Here are the most important do's and don'ts of glove use:

Work from “Clean” to “Dirty”

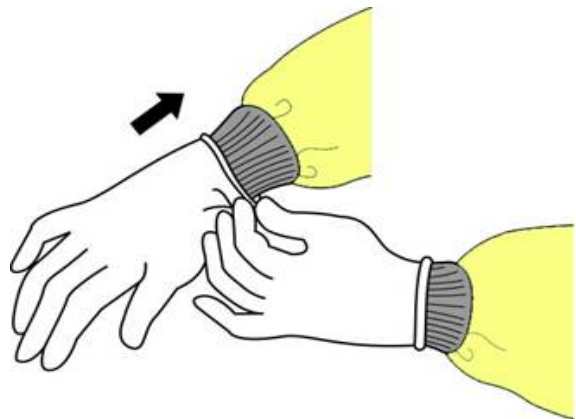
This is a basic principle of infection control. In this instance, it refers to touching clean body sites or surfaces before you touch dirty or heavily contaminated areas.

Change Gloves as Needed

If gloves become torn or heavily contaminated and additional care-giving must be performed, change the gloves before starting the next task. Gloves should never be washed and used again. Washing gloves will **NOT** make them safe for reuse. It may not be possible to remove all germs and washing gloves may cause tearing or leaking.

How to Put On Gloves

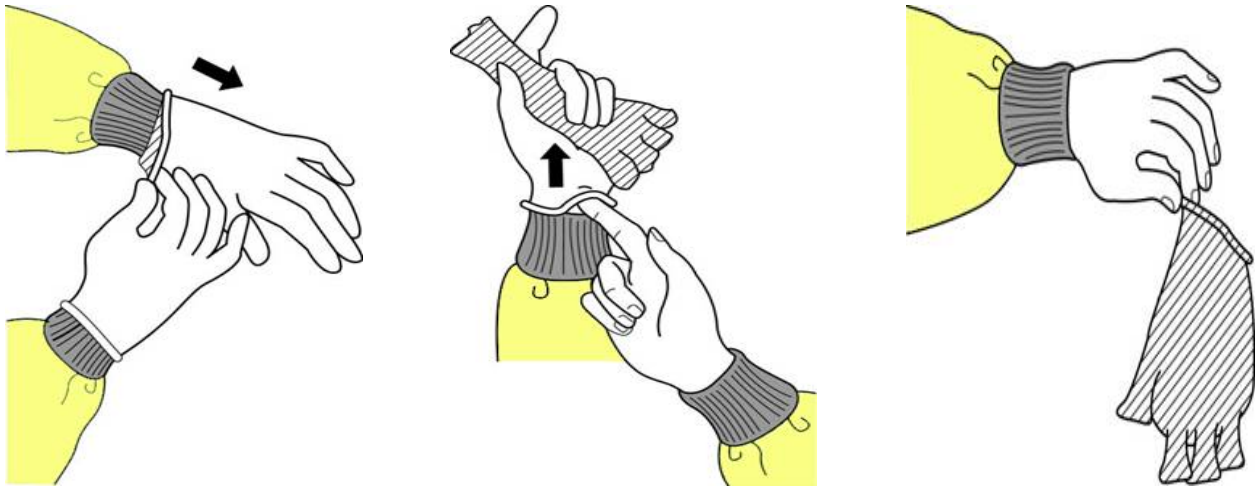
- Always put on gloves last, after putting on your respirator.
- Insert each hand into the appropriate glove and adjust as needed.
- Keep gloved hands away from face.
- Avoid touching or adjusting other PPE.
- Limit surfaces and items touched.
- Replace gloves if they become torn.
- Wash your hands before putting on new gloves.
- Do not re-use gloves. Throw them away after each use.



Protect Yourself

How to Take Off Gloves

- Grasp glove outside edge near the wrist.
- Peel away from hand, turning the glove inside out.
- Hold in opposite gloved hand.
- Slide ungloved finger under the wrist of the remaining glove.
- Peel off from inside, creating a bag for both inside-out gloves.
- Place in a plastic bag that is tied or knotted shut and throw away with regular trash.
- Wash your hands.



Adapted from the U.S. Centers for Disease Control and Prevention

Remember: The person sick with the flu is contagious for 5 to 14 days or longer!
Listen for public health guidance about this at the time of the pandemic.

Protect Others

What Caregivers Can Do

Caregivers need to take steps to prevent the spread of flu to others in the home. Caregivers should separate sick people from healthy people as much as possible. When practical, the sick person should stay in a separate room away from others. Other people living in the home should limit contact with the sick person as much as possible. One person in the household should be the main caregiver for the person who is ill. Ideally, this caregiver should be healthy and not have medical conditions that would put him or her at risk of severe influenza disease.

These conditions include:

Pregnancy

Heart problems

Chronic lung diseases

Diabetes

Kidney Disease

Age over 65

Disease or treatment that suppresses the immune system



Caregivers should make sure everyone in the household follows the recommendations in this guide to help prevent the spread of disease.

Cleaning & Disinfecting

Disinfecting surfaces will help kill flu germs. Cleaning and disinfecting are not the same thing! Cleaning helps to remove germs. Disinfecting destroys them. For many germs, cleaning with soap and water is usually enough. But, when it comes to flu germs, you will want to disinfect for an extra level of protection. Be sure that your home always has an adequate supply of items for handwashing, cleaning, and disinfecting.

Protect Others

Hard Surfaces, Garbage, Dishes, and Laundry

Flu viruses can live up to 2 days on **hard surfaces**. Use a general household cleaner to wash hard surfaces (toys, sinks, faucets, counters, doorknobs, telephones, light switches, microwave and refrigerator handles, etc.). Then use a household disinfectant to destroy the influenza virus. Be sure to follow the manufacturer's instructions. You can make a disinfectant by mixing 1/4 cup bleach in 1 gallon of water, or 1 tablespoon bleach in 4 cups of water. Wear gloves and use paper towels to apply the bleach solution. Let the solution stay on the surface you are disinfecting for 3 to 5 minutes, then rinse thoroughly and air dry. Surfaces that are frequently touched with hands should be cleaned and disinfected often. Electronic items, such as, computers, cell phones, handheld games, and remote control devices should be cleaned regularly with disinfectant wipes.



Careful, thorough cleaning and disinfecting of surfaces is effective in removing the flu virus and many other germs. Do not share personal items with the sick person. These items include eating utensils, cups, computers, phones, pens, clothes, towels, blankets, and bed sheets.

The **garbage** generated by a person with the flu should be handled with care and disposed of with regular trash. Be sure to tie garbage bag securely and wash your hands thoroughly after handling it.



Wash **dishes and eating utensils** with warm water and dish soap. It is not necessary to separate dishes and eating utensils between sick and healthy people as long as they are washed thoroughly with warm water.

Everyone's dishes can be washed together by hand or in a standard dishwasher. If washing by hand, use paper towels to scrub the sick person's dirty dishes and eating utensils. Dispose of the paper towel after use.

Protect Others

Disinfection of **laundry** or linen from a person who may have the flu is not necessary. However, disposable gloves and facemask should be used when handling it. Do not “hug” or shake their dirty laundry. Use a laundry basket. It does **not** need to be washed separately from other laundry. Wash clothing and linen in a warm wash cycle with a commercial laundry detergent and dry as usual.



If a Death Occurs at Home



If a person with influenza dies at home, the body may still be infectious, and the live virus may still be on the body, clothing or bedding. Do not touch any of these without wearing PPE (mask and gloves). When you are finished, be sure to properly remove and dispose of the PPE, then wash your hands thoroughly. A person who dies at home should be wrapped in a sheet and kept in a cool, dry location until picked up by funeral services.

Note: Once health officials understand the specifics about a particular pandemic flu virus, they will provide more information about the steps to take – and not take -- if a death occurs at home.

Caring for People with Chronic Diseases or Conditions

If one of your loved ones has a chronic illness (a medical condition for which they regularly receive treatment) and becomes sick with the flu, call the doctor to confirm that their usual medications should be continued during this time. Ask whether the chronic illness means that special care is necessary and if there are any particular signs or symptoms to watch for.

People with chronic diseases or conditions are at risk for medical complications because of the flu. Chronic diseases and conditions include asthma, cardiovascular disease, diabetes, immuno-compromising conditions, renal failure, and severe neuromuscular disease.

Flu Care Instructions

Since most adults and children sick with the flu will be cared for by another person in the same household, it will be important for the caregiver to know how to do certain things. This section gives the caregiver information about:

- how to take a temperature
- how to treat and reduce fevers
- how to look for signs of dehydration
- how to rehydrate a sick person
- when to call for medical advice



Note: Unless otherwise specified, a “child” is anyone under age 18.

Monitoring Symptoms

It will be important to monitor how the sick person is doing. Keep a care log. Write down the date, time, temperature, symptoms, medicines given and dosage. Make a new entry every four hours, or more often, if the symptoms change. For a sample personal care log, see the last page of this guide.

Questions

If you have questions after reading this guide, contact your health care provider to ask about caring for the sick person. However, it may be difficult to contact your usual health care provider during an influenza pandemic. The NJ Department of Health and Senior Services website (<http://www.njflupandemic.gov>) will provide frequent updates, including how to get medical advice. If special telephone hotlines are used, these numbers will also be on the website and announced through the media.

Don't forget to practice healthy habits!

- Cover your mouth and nose with a tissue when you cough and sneeze and then wash your hands.
- If a tissue is not available, cough and sneeze into your sleeve.
- When washing your hands, use soap and warm water and scrub for 15 to 20 seconds.
- If soap and water are not available, use alcohol-based hand sanitizer with at least 60% alcohol.
- Avoid touching your eyes, nose, and mouth.

Temperature

Fever

In most cases, fever is not serious and it is a good sign that the person's body is working to fight off an illness. It is important that the thermometer is used correctly in order to get the proper temperature reading. The placement location for the thermometer is different for infants, children, and adults.

If you do not have access to a thermometer, you can check for a fever by touching the skin of the person who is sick. If the skin is hot and dry, cheeks are flushed, lips and mouth are dry and they have the "chills," they probably have a fever.

NOTE: Fever can cause dehydration. Severe dehydration can cause death.

Adults and Children

A. Measurement

The best method for taking a temperature depends on the age of the person who is sick.

Age	Rectum	Mouth	Armpit
Newborn to 3 months	X		
3 months to 3 years	X		X
4 to 5 years	X	X	X
5 years and older		X	X

Credit: American Academy of Pediatrics

Ask the pharmacist any questions you may have when you buy a thermometer.

- **Temperatures taken with ear thermometers are not reliable.**
- **For rectal, oral (mouth), and armpit, use a standard digital thermometer. Do not use a rectal thermometer orally. Do not use an oral thermometer rectally.**
- **Never return an unclean thermometer to its storage case.**
- **On page 26 of this guide, record the time, temperature reading, the method you used and the amount of medicine given.**
- **If medicines are being used to reduce fever, take the temperature *before* the next the dose is given.**
- **Never leave a person alone while their temperature is being taken.**

Taking the Temperature of the Elderly

For some elderly people, normal body temperature may be different from that of younger adults. The elderly may regularly take medicines such as aspirin, ibuprofen, or acetaminophen, which can lower body temperature. There are two ways you can decide what a fever is for an elderly person:

- A rise of 2°F or more over the "normal temperature" for the person
- An oral temperature of more than 99°F

Temperature	Adults and Children
<u>Measurement (continued)</u>	<p>B. How to Use a Digital Thermometer:</p> <ol style="list-style-type: none"> 1. Wash the tip of the thermometer with cool, soapy water and rinse. 2. Press the button to turn the thermometer on. 3. Put the thermometer in the body (see C. below for detailed instructions). 4. Hold the other end of the thermometer for the length of time specified by the manufacturer. 5. Wait for the thermometer to signal. 6. Remove the thermometer. 7. Read the temperature on the display. 8. To clean a digital thermometer after use, wash only the tip with soap and warm water and wipe off with 70% alcohol after use. Dry well. <p>C. Detailed Instructions for Rectum, Armpit, Mouth, and Ear:</p> <p>Rectum: Place some petroleum jelly (such as Vaseline TM) on the tip of the thermometer. With your baby lying on its back or side, with knees bent, gently place the tip into the rectum about 1/2 inch to 1 inch. Do not insert it too far. Hold the thermometer at all times with your fingers.</p> <p>Armpit: Place the tip of the thermometer against the skin in the armpit and hold the arm snugly against chest.</p> <p>Mouth: Place the tip of the thermometer under tongue and close mouth. Do not bite down on the thermometer. The sick person should not smoke a cigarette or drink something hot or cold for half an hour before taking a</p>
<u>Treatment</u>	<ol style="list-style-type: none"> 1. Take off heavy clothing and blankets so that the heat may leave the body. 2. Dress in lightweight clothing and keep room temperature at 68° F. 3. <u>CHILDREN UNDER AGE 19:</u> May give acetaminophen (Tylenol TM) or ibuprofen (Advil TM, Motrin TM) as directed for comfort and to reduce fever. Follow the directions on the package label. There is a risk of over dosage if taken improperly. Never give acetylsalicylic acid (Aspirin TM) to anyone under age 19. Aspirin can cause a serious illness in children called "Reye's Syndrome." <u>ADULTS:</u> May give aspirin, acetaminophen (Tylenol TM), or ibuprofen (Advil TM, Motrin TM) as directed for comfort and to reduce fever. 4. Offer cool fluids frequently. 5. Allow the person to rest and stay home for at least 7 days.

Temperature	Adults and Children	
<u>When to Seek Medical Attention</u>	<p>What is considered a “high fever” depends on age:</p> <ul style="list-style-type: none"> Babies younger than 3 months: Fever higher than 100.4°F Babies 3 to 6 months old: Fever higher than 101°F Older than 6 months to 2 years old: Fever of 102°F or higher Child age 5 and older and adults: Fever higher than 104°F that does not go down within 2 hours of home treatment. <p>Regardless of age:</p> <ul style="list-style-type: none"> Fever in persons with diseases of the immune system (HIV/AIDS, leukemia, cancer patients on chemotherapy, etc.) Fever is not responding to fever medicines within 6 hours Fever goes away for 1 to 2 days and then comes back Fever lasts more than 3 days and sick person has difficulty breathing. Fever lasts more than 5 days 	
Body Aches and Headaches	Adults	Children
<u>Treatment</u>	<ul style="list-style-type: none"> Give acetaminophen or ibuprofen as directed. Give lukewarm baths. Have the person rest in bed. 	<ul style="list-style-type: none"> Give acetaminophen or ibuprofen as directed. Give lukewarm baths. Have the child rest in bed. <p>NEVER give aspirin to someone under the age of 19 unless directed by your doctor.</p>
<u>When to Seek Medical Attention</u>	Seek medical attention when the sick person has severe ear or severe muscle pain or stiff neck.	

Cough, Sore Throat, Sneezing, and Stuffy Nose	Adults and Children	
<u>Treatment</u>	<p>Cough, Sneezing and Stuffy Nose</p> <p>Medicines to treat symptoms should be given only to individuals 5 years of age and older. Be sure to follow directions on the package label. For children under 5 years old, encourage drinking of fluids, use saline nose drops, and have the child blow their nose if they are able to do so.</p>	

Cough, Sore throat, Sneezing and Stuffy Nose	Adults and Children	
<u>Treatment</u>	<ul style="list-style-type: none"> • Liquid cough medicines called “expectorants” help loosen phlegm (mucous). • Liquid or tablet medications called “decongestants” help to reduce nasal stuffiness. • Liquid or tablet medications called “antihistamines” will help dry up a runny nose. • External medications that are rubbed on the chest can make breathing through your nose easier. • Nose drops and nasal sprays work to relieve nasal congestion. <p>Store brands of these medicines may be used. Some of these medications are not recommended for adults with high blood pressure, so read the directions carefully.</p> <p>NOTE: Medicines containing dextromethorphan will help reduce dry cough but can cause constipation.</p>	
	Adults	Children
<u>Treatment</u>	Sore throat <ul style="list-style-type: none"> • Use cough drops or any hard candy or lozenge to soothe a sore throat. • Give lots of fluids. • Gargle with warm salt water. • Use aspirin, acetaminophen, or ibuprofen to decrease pain. 	Sore throat <ul style="list-style-type: none"> • Give acetaminophen or ibuprofen as directed to decrease pain. • Give lots of fluids. <p>If the child is old enough, give cough drops or any hard candy or lozenge to soothe a sore throat, or have the child gargle with warm salt water.</p>
<u>When to Seek Medical Attention</u>	Seek medical attention if the person has a croupy cough (barking sound) or a cough that produces blood.	

Breathing	Adult	Children
<u>Measurement</u>	<p>For adults and older children (over 5 years of age), watch the chest rise or fall. Use a watch or clock and count the number of times the chest rises (expands) in 30 seconds (half a minute).</p> <p>Multiply by 2 in order to get the number of breaths per minute. Write this number down so you do not forget.</p>	<p>Children and infants appear to use their stomachs for breathing, so you should uncover the child so you can see the stomach as well as the chest.</p> <p>Count the number of times the stomach or chest rises (expands). Use a watch or clock and count the number of times it expands in 30 seconds (half a minute). Multiply by 2 in order to get the number of breaths per minute. Write this number down so you do not forget.</p>

Breathing	Adults	Children										
<u>When to Seek Medical Attention</u>	<p>For adults and children over 5 years old: Look at the number you counted.</p> <p>If the person’s breathing rate is more than 30 breaths per minute, it is a sign that they are having trouble breathing and you should seek medical attention.</p> <p>Also seek medical attention if the person shows signs of other respiratory problems, such as difficulty breathing or chest pain with each breath.</p>	<p>Compare the number you counted to the chart below. If your child’s breathing rate is more than the number in the chart, it is a sign that they are having trouble breathing and you should seek medical attention.</p> <p>Definition of fast breathing:</p> <table><tr><th>Age</th><th># of Breaths per Minute</th></tr><tr><td>Under 2 months</td><td>Over 60</td></tr><tr><td>2 to 12 months</td><td>Over 50</td></tr><tr><td>Over 12 months to 5 years</td><td>Over 40</td></tr><tr><td>Over 5 years</td><td>Over 30</td></tr></table> <p>In children under 5 years of age, other signs of breathing trouble include:</p> <ul style="list-style-type: none">• Grunting while breathing• Whistling, squeaking, wheezing noise while breathing• Flaring nostrils with each breath• Chest rising opposite to the stomach rising	Age	# of Breaths per Minute	Under 2 months	Over 60	2 to 12 months	Over 50	Over 12 months to 5 years	Over 40	Over 5 years	Over 30
Age	# of Breaths per Minute											
Under 2 months	Over 60											
2 to 12 months	Over 50											
Over 12 months to 5 years	Over 40											
Over 5 years	Over 30											

Vomiting and Diarrhea	Adults and Children
<u>Treatment</u>	<p>Monitor how the person is eating and drinking.</p> <p>Vomiting</p> <p>If the sick person is vomiting, do not give any liquids or food by mouth for at least an hour. Let the stomach rest and then give a clear liquid, like water, in small amounts. Start with 1 teaspoon to 1 tablespoon every 10 minutes. If they continue to vomit, let the stomach rest again for another hour. Then try to give small but frequent amounts of clear liquids. When the sick person has stopped vomiting, gradually increase the amount of liquids and use liquids with electrolytes (salt and sugar) – For more on electrolytes see the section on dehydration on page 20.</p>

Vomiting and Diarrhea	Adults and Children
<u>Treatment (continued)</u>	<p>After the adult or child has had clear liquids for 6 to 8 hours without vomiting, you can start to give them solid foods that are easy to digest, such as saltine crackers, soup, plain noodles, or rice.</p> <p>Diarrhea For treatment of diarrhea, see treatment for dehydration, page 20.</p>
<u>When to Seek Medical Attention</u>	Seek medical attention if the person has been frequently vomiting for more than an hour or has severe diarrhea. Severe diarrhea means that a lot of fluid is being lost. With severe diarrhea stools are very runny, frequent (as often as hourly), and there are usually stomach cramps. Dehydration can occur with prolonged diarrhea.

Dehydration	Adults and Children	
<u>Prevention</u>	<p>At the first sign of the flu, begin giving the sick person plenty of liquids to drink, such as water, to maintain the right level of water in the body. They may not feel like drinking, but it is important to keep giving liquids so they do not get dehydrated (lose too much water). Make sure they drink enough liquid to produce pale yellow urine. You may include liquids with electrolytes such as Pedialyte® (for infants and children up to 3 years old) and Gatorade® (for children over 3 years old and adults).</p> <p>Refer to pages 20 and 21 to see which liquids are acceptable to give.</p> <p>If you cannot buy a liquid with electrolytes, you can make your own rehydration solution. See pages 22-23 for recipes.</p>	
	Adults	Children
<u>Symptoms</u>	<p>Signs of dehydration include:</p> <ul style="list-style-type: none"> • dry mouth and decreased saliva • dry eyes with little or no tear production • decreased urination • dark and concentrated urine • sunken eyes • loss of skin elasticity • dizziness when the sick person stands or sits up 	<p>Signs of dehydration include:</p> <ul style="list-style-type: none"> • dry mouth and tongue • no tears • decrease in urine (fewer than 2 wet diapers or urinations per day) • dark circles or sunken eyes • “loosening” of the skin • sunken “soft spot” on infants • decreased activity • weight loss

Dehydration	Adults and Children
<u>Treatment</u>	<p>To treat dehydration, give small amounts of liquid frequently. For example, give sips or spoonfuls of liquids every 5 to 10 minutes over a four-hour period. You may include liquids with electrolytes such as Pedialyte® (for infants and children up to 3 years old) and Gatorade® (for children over 3 years old and adults). Liquids with electrolytes replace the loss of salt and sugar in the body. Watch for an increase in the number of times the person urinates, a lighter color of urine, and overall improvement of flu symptoms. These are signs that the liquids are working. The sick person should continue to drink enough fluids so that their urine is pale yellow in color.</p> <p>Note: For infants under 1 year old, continue breast and/or formula feeding in addition to other liquids. Infants under 1 year old should not only drink rehydration or diluted fluids for more than 24 hours without specific guidance from a health care provider.</p> <p>Refer to the section below and the chart on page 21 to see which liquids are acceptable to give. If you cannot buy a liquid with electrolytes, you can make your own rehydration solution. See pages 22-23 for recipes.</p>
<u>When to Seek Medical Attention</u>	<p>If the sick person has not urinated in more than 12 hours (6 hours for infants under one year old) and has symptoms such as dry mouth, dry eyes or little to no tears, and has an overall sick appearance, you should call for medical advice.</p> <p>Also seek medical attention if the sick person has stopped taking liquids.</p>

Dehydration: Acceptable Liquids

It is important for the sick person to stay hydrated by drinking plenty of liquids in order to help fight the flu symptoms and prevent dehydration. The following chart tells you which liquids are okay to give to infants, young children, and adults with the flu in order to prevent or treat dehydration. If the sick person is not eating, certain liquids will need to be given in order to treat dehydration and restore the right level of electrolytes (salt and sugar) that the body needs.

Liquids to Avoid

Certain liquids like alcohol and caffeinated drinks (coffee, teas, caffeinated sodas, etc.) should be avoided because they can cause further dehydration.

Dehydration Prevention and Treatment Chart

Age Group	Prevent Dehydration (if eating)	Prevent Dehydration (if not eating) and Treat Dehydration (if not eating)
Infants under 1 year of age	<ul style="list-style-type: none"> • Breast milk • Standard infant formula • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte® • Diluted Juices* (1/2 water, 1/2 juice) - Use for less than 24 hours, and only in addition to other fluids. <p><i>Alternative: Homemade Cereal Based Oral Rehydration Solution (See Recipe on page 23)</i></p>	<ul style="list-style-type: none"> • Breast milk • Standard infant formula • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte® <p><i>Alternative: Homemade Cereal Based Oral Rehydration Solution (See Recipe on page 23)</i></p>
Toddlers 1 to 3 years of age	<ul style="list-style-type: none"> • Milk (if not vomiting) • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte® • Broth or soup • Jell-O® Water (1 package per quart of water or twice as much water as usual) • Popsicles • Gatorade® • Kool-Aid® • Juices* 	<ul style="list-style-type: none"> • Store-bought oral rehydration solution such as Pedialyte®, Naturalyte®, Infalyte®, or Rehydralyte® <p><i>Alternative: Homemade Cereal Based Oral Rehydration Solution (See Recipe on page 23)</i></p>
Children over 3 years, teens and adults	<ul style="list-style-type: none"> • Water • Broth or soup • Jell-O® Water (1 package per quart of water or twice as much water as usual) • Popsicles • Gatorade® • Kool-Aid® • Juices* 	<p>Homemade Oral Rehydration Solution <i>(See Recipe on page 22)</i></p>

* Do not give apple or pear juice because they include a certain type of sugar that increases water loss.

Dehydration: Acceptable Liquids

Recipes for Oral Rehydration Solutions

Recipe for Oral Rehydration Solution for Adults, Teens, and Children Over 3 Years Old

Instead of a store bought rehydration solution or sports drink (such as Gatorade®) you can make your own solution at home.

INGREDIENTS:

- 4 cups clean water
- 2 tablespoons of sugar
- 1/2 teaspoon of table salt

DIRECTIONS:

1. Mix well in a clean container.
2. Cover the container and store the solution in the refrigerator.
3. Do not drink directly from this container.
4. Pour portions, as needed, into a drinking cup. Chilling the solution may improve the taste.



If the person still needs this solution after 24 hours, make a fresh batch.

NOTE: Do not boil the solution as this will concentrate the ingredients. If local health officials give a “Boil Water Order,” boil the water first for 1 minute and then allow it to cool before adding the sugar and salt.

Dehydration: Acceptable Liquids

Recipe for Cereal-Based Oral Rehydration Solution for Children Under 3 Years Old

INGREDIENTS:

- 2 cups of clean water
- 1/2 cup of instant baby rice cereal
- 1/4 level teaspoon table salt

DIRECTIONS:

1. Measure quantities very carefully.
2. Mix well in a clean container.
3. Cover the container and store the solution in the refrigerator.
4. Do not serve directly from this container.
5. Pour portions, as needed, into a cup or baby bottle depending on the age of the child.
6. If a baby bottle is used, the hole in the nipple may need to be enlarged.
7. If the child still needs the solution after 24 hours, make a fresh batch.



NOTE: Do not boil this solution as this will concentrate the ingredients. If local health officials give a "Boil Water Order," boil water first for 1 minute and then allow it to cool before adding cereal and salt.

If YOU Have the Flu

If you are alone and are sick with the flu, you may have to take care of yourself, at least for a while. The most important thing is to rest and to get enough fluids. You can do it!

- Stay calm.
- Stay in bed.
- Keep the following items next to you or nearby where you can reach them easily:

Telephone

Thermometer

Tissues

Garbage can

Alcohol-based hand sanitizer

Bottled water

Straws

Medicines to reduce fever, cough, and other flu symptoms

Cold water and wash cloths

(to use for cold compresses on your forehead to bring down your fever)



- Keep any prescribed medications you are taking at your bedside.
- If you cannot make it to the bathroom, have a portable commode or bucket-like container close at hand.
- Have a watch or clock, TV remote, radio with extra batteries, books, and other items handy to help you pass the time.
- On a daily basis, stay in touch by phone with a friend or relative.

Maintain a Healthy Mind and Body During a Flu Pandemic

- Help prevent illness in yourself and others by practicing healthy habits. These are listed on page 13.
- During a flu pandemic, social distancing measures (such as closure of schools, day care centers, colleges, and workplaces and cancellation of public gatherings) are intended to reduce the chance of exposing more and more people to the flu virus. Make every effort NOT to re-congregate in the community.
- Improve your physical well-being. Stay healthy by being physically active and eating well. Make time for regular exercise and for planning and preparing meals that feature vegetables, fruits, and whole grain products along with lean meats, fish, poultry, beans, and low fat dairy products. Drink plenty of water and avoid excessive consumption of anything that can stress your body and defenses, including sugar, salt, caffeine, alcohol, and saturated fats.
- Stay busy mentally. Express yourself through writing, drawing, music, and other arts.
- Find ways to enjoy yourself, to restore both mind and body. Any hobby or calming pastime, from knitting and journal-writing to reading and playing video games, can bring needed periods of stress relief. You may also find comfort in your personal beliefs or spirituality.
- Maintain as much of your daily routine as possible.
- If you or someone you know is having a hard time managing their emotions, seek help from a medical or mental health professional. The New Jersey Disaster Mental Health Helpline is 877-294-HELP (4357) TTY 877-294-4356.

Pay Special Attention to Children

- Let children know it is okay to feel upset when something scary happens.
- Encourage children to express feelings and thoughts, without making judgment.
- Enjoy your child and take part in activities together.
- Turn off the TV and radio, especially if the news makes you worried. If you are worried, your child can sense it.



Influenza Personal Care Log

(Copy, fill out and share information with health care provider.)

Name _____ Name of Health Care Provider _____

Date	Time	Temperature and Method Used	Medications	Observations *

* Any symptoms such as coughing, rapid breathing, confusion, how the person looks, person's activities, liquids or foods taken since last observation, etc.